

1 The opinion in support of the decision being entered today is *not* binding
2 precedent of the Board

3
4 UNITED STATES PATENT AND TRADEMARK OFFICE

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6
7 BEFORE THE BOARD OF PATENT APPEALS
8 AND INTERFERENCES
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11 *Ex parte* WILLIAM HEIN and BRIAN GRANGER
12

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14 Appeal 2007-0130
15 Application 10/688,584
16 Technology Center 3700
17

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19 Decided: September 28, 2007
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22 *Before:* MURRIEL E. CRAWFORD, JENNIFER D. BAHR, and LINDA E.
23 HORNER, *Administrative Patent Judges.*

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25 CRAWFORD, *Administrative Patent Judge.*
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28 DECISION ON APPEAL
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30 STATEMENT OF CASE

31 Appellants appeal under 35 U.S.C. § 134 (2002) from a final rejection
32 of claims 1-6, 8 and 9. Claims 7, 10 and 11 have been canceled. We have
33 jurisdiction under 35 U.S.C. § 6(b) (2002).

34 Appellants invented a microwave device including a loading section, a
35 treatment section with a plurality of microwave guides therein, an unloading
36 section and a reciprocating ram capable of pushing material from the loading

1 section to the treatment section and then to the unloading section
2 (Specification 4).

3 Claim 1 under appeal reads as follows:

4 1. A microwave dryer for drying various materials
5 including:

6 (1) a loading section into which the material may be
7 introduced using loading means;

8 (2) a treatment section which is in communication with the
9 loading section;

10 (3) an unloading section which is in communication with the
11 treatment section;

12 (4) a reciprocating ram within said loading section which is
13 capable of pushing the material from said loading section into said
14 treatment section and through said treatment section into said
15 unloading section;

16 (5) a plurality of microwave guides within said treatment
17 section capable of directing microwaves from a microwave generator
18 into the material within said treatment section; and

19 (6) unloading means capable of removing the material from
20 said unloading section; whereby material may be loaded into said
21 loading section and pushed into said treatment section by the
22 reciprocating ram; the material treated by microwaves within said
23 treatment section; the treated material further pushed by said
24 reciprocating ram into said unloading section; and the material
25 removed from said unloading section by unloading means.
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27 The Examiner rejected claims 1 and 2 under 35 U.S.C. § 103 as
28 being unpatentable over Chauffoureaux in view of Wear.

29 The Examiner rejected claims 3-6, 8 and 9 under 35 U.S.C. § 103 as
30 being unpatentable over Chauffoureaux in view of Wear and Gerling.

31 The prior art relied upon by the Examiner in rejecting the claims on
32 appeal is:

1	Chauffoureaux	US 4,003,554	Jan. 18, 1977
2	Gerling	US 4,326,114	Apr. 20, 1982
3	Wear	US 4,640,020	Feb. 3, 1987
4			

5 The Examiner found that Chauffoureaux discloses the invention as
6 claimed except that Chauffoureaux does not disclose a plurality of
7 microwave guides. The Examiner relies on Wear for teaching a plurality of
8 microwave guides.

9 The Examiner relies on Gerling for teaching that the treatment section
10 may be tilted as required by claim 3 and for teaching a modular device as
11 required by claim 4.

12 Appellants contend Chauffoureaux is not prior art and further that
13 Chauffoureaux does not disclose a dryer but rather an extruder.

14 Appellants also contend that Chauffoureaux does not include an
15 unloading zone or a reciprocating ram.

16 Appellants further contend that the Examiner erred in his holding that
17 the claimed subject matter would have been obvious because Chauffoureaux
18 teaches that one would not want to include a plurality of microwave guides
19 because such would create hot spots.

20 Appellants also contend that a person of ordinary skill in the art would
21 not have found the subject matter of claims 3-6 obvious in view of the
22 teachings of Chauffoureaux in view of Wear and Gerling because Gerling
23 discloses that only the tube is tilted not the entire oven.

24

ISSUES

The first issue is whether Appellants have shown that the Examiner erred by determining that Chauffoureaux is relevant prior art and discloses a microwave device as claimed.

The second issue is whether Appellants have shown that the Examiner erred in finding that Chauffoureaux discloses an unloading zone and a reciprocating ram.

The third issue is whether Appellants have shown that the Examiner erred in holding that it would have been obvious to include a plurality of microwave guides in the Chauffoureaux device.

The fourth issue is whether the Appellants have shown that the Examiner erred in holding that the subject matter of claims 3-6 would have been obvious in view of the teachings of Chauffoureaux in view of Wear and Gerling because Gerling only discloses that the tube is tilted not the entire oven.

FINDINGS OF FACT

Chauffoureaux discloses a microwave device that includes a loading zone in the form of feed hopper 5' (Figure 2). A treatment section 1' is included in communication with the loading section 5'. A microwave generator 2' is disposed in the treatment section 1' which is capable of directing microwaves into the material within the treatment section 1' (Chauffoureaux, col. 5, ll. 46-47). The microwaves from the microwave generator 2' are directed to the treatment section 1' through an unlabeled structure (Figure 2). The unlabeled structure clearly directs the microwaves

1 from microwave generator 2' to the treatment section 1' and is therefore a
2 microwave guide. A plurality of microwave guides may be positioned along
3 the treatment section 1' (Chauffoureaux, col. 2, ll. 31-34). An unloading
4 section through which the material is unloaded comprising a die 16 is
5 provided. A piston ram 17 is provided for causing the material to travel
6 through the treatment section (Chauffoureaux, col. 2, ll. 55-60). A person of
7 ordinary skill in the art would understand that the piston ram 17 would move
8 in one direction toward the unloading section to move the material through
9 the treatment section and then in another direction back to the starting
10 position. From this starting position, the piston ram is able to move more
11 material through the treatment section 1'. Therefore, in this respect the
12 piston ram 17 is a reciprocating ram as broadly claimed.

13 Wear discloses a microwave device which includes a plurality of
14 microwave guides 116, 126 and 132 (Wear, col. 8, l. 29; col. 9, l. 43; col. 10,
15 l. 20).

16 Gerling discloses a microwave device having a tube through which
17 the material to be treated with microwaves is tilted (Figure 1). The tube
18 causes the material to be treated to travel through a microwave oven 20.
19 Gerling also discloses that the microwave device is of the type adapted for
20 modular construction which readily permits scale up and scale down to suit
21 production requirements (Gerling, col. 9, ll. 47-51).

22 DISCUSSION

23 *Rejection of claims 1 and 2*

24 We are not persuaded by Appellants' argument that Chauffoureaux is
25 not relevant prior art because it relates to the heating of a polar polymer and

1 is not related to a microwave dryer but rather to an extruder. In our view,
2 the recitation in claim 1 related to a microwave dryer is intended use
3 language. The manner or method in which a machine is to be utilized is not
4 germane to the issue of patentability of the machine itself. *In re Casey*, 370
5 F.2d 576, 580, 152 USPQ 235, 238 (CCPA 1967). A statement of intended
6 use does not qualify or distinguish the structural apparatus claimed over the
7 reference. *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA
8 1962). There is an extensive body of precedent on the question of whether a
9 statement in a claim of purpose or intended use constitutes a limitation for
10 purposes of patentability. *See generally Kropa v. Robie*, 187 F.2d 150,
11 155-59, 88 USPQ 478, 483-87 (CCPA 1951) and the authority cited therein,
12 and cases compiled in 2 Chisum, Patents § 8.06[1][d] (1991). Such
13 statements often, although not necessarily, appear in the claim's preamble.
14 *In re Stencel*, 828 F.2d 751, 754, 4 USPQ2d 1071, 1073 (Fed. Cir. 1987).
15 The Chauffoureaux device includes all the structure of the Appellants' claim
16 1 and therefore is capable of operating as a microwave dryer.

17 We are also not persuaded by Appellants' argument that
18 Chauffoureaux does not disclose an unloading zone. It is clear that the
19 material processed in Chauffoureaux is unloaded. The fact that the material
20 is unloaded through a die does not change the fact that the material is
21 unloaded and the zone through which it is unloaded is an unloading zone. In
22 addition, we have found that Chauffoureaux does disclose a reciprocating
23 piston ram.

24 Appellants' argument that one of ordinary skill in the art would not
25 modify the Chauffoureaux device so as to include a plurality of microwave

1 guides is not persuasive because we found above that Chauffoureaux itself
2 discloses the provision of a plurality of microwave guides making the
3 disclosure in Wear cumulative.

4 We are likewise not persuaded by Appellants' argument that the
5 Chauffoureaux reference is a Traveling Wave Applicator whereas the
6 Appellants' invention is a Multi-mode Applicator because the argument is
7 not commensurate in scope with the recitations in claim 1 which does not
8 recite a Multi-mode Applicator.

9 In view of the foregoing, we will sustain the Examiner's rejection of
10 claim 1 under 35 U.S.C. § 103 as being unpatentable over Chauffoureaux in
11 view of Wear and Gerling.

12 We will also sustain the Examiner's rejection of claim 2 because
13 Appellants have not argued the separate patentability of this claim.

14 *Rejection of claims 3 to 6, 8 and 9*

15 In regard to the Examiner's rejection of claim 3 under 35 U.S.C. §
16 103, we are not persuaded by Appellants' argument that Gerling does not
17 disclose that the oven is tilted because this argument is not commensurate in
18 scope with the recitation in the claims. Claim 3 recites that the treatment
19 section may be tilted. The tube of Gerling, which is tilted, is the treatment
20 section of Gerling. We are not persuaded by the Appellants' argument that
21 the material in Gerling is not in physical contact with the part of the device
22 that includes the microwave guides because this argument is not
23 commensurate in scope with claim 3. Claim 3, which is dependent on claim
24 1, does not require that the material be in physical contact with the part of
25 the device that includes the microwave guides. While claim 1, from which

1 claim 3 depends, requires that the plurality of microwave guides be in the
2 treatment section, Chauffoureaux discloses such.

3 Appellants' arguments directed to whether one would be motivated to
4 modify the Gerling device are not persuasive because the Examiner does not
5 propose to modify the Gerling device. Rather, the Examiner reasons that
6 Chauffoureaux may be modified so has to have a tilted treatment section as
7 disclosed in Gerling.

8 In view of the foregoing, we will sustain the Examiner's rejection of
9 claim 3. We will also sustain the Examiner's rejection of claims 5, 6, and 9
10 because the Appellants have not argued the separate patentability of these
11 claims.

12 We will also sustain the Examiner's rejection as it is directed to
13 claims 4 and 8 because Gerling discloses that the treatment section is
14 modular.

15 The decision of the Examiner is *affirmed*.

16 No time period for taking any subsequent action in connection with
17 this appeal may be extended under 37 C.F.R. § 1.136(a).

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19 AFFIRMED
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23 Gene R. Woodle
24 3516 Woodle Dr.
25 Rapid City, SD 57702